Docket #: S18-204

Rai1-Tag, an epitope tagged Rai1 allele (mouse model) - Jackson Labs stock # 029101

The Rai1-Tag knock-in allele expresses a FLAG/myc-tagged RAI1 (Rai1-Tag) before Cre recombinase exposure. Cre-mediated deletion of the floxed FLAG-myc-STOP sequence results in expression of RAI1/EGFP fusion protein (Rai1EGFP). These Rai1Tag may be useful for studying Rai1 DNA binding, circuit assembly and neuronal communication in human disorders such as Smith-Magenis syndrome (SMS).

The mouse model has been deposited at Jackson Labs: Stock # 029101

Applications

• These Rai1-Tag may be useful for studying Rai1 protein functions, related to a human disorders called Smith-Magenis syndrome (SMS).

Advantages

• Bypass the requirement to use endogenous antibody.

Publications

 uang WH; Guenthner CJ; Xu J; Nguyen T; Schwarz LA; Wilkinson AW; Gozani O; Chang HY; Shamloo M; Luo L. 2016. Molecular and Neural Functions of Rai1, the Causal Gene for Smith-Magenis Syndrome. Neuron 92(2):392-406PubMed: 27693255MGI: J:237687

Innovators

- Wei-Hsiang Huang
- Liqun Luo

Licensing Contact

Brenda Martino

Biological Materials Specialist

<u>Email</u>